UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|----------------------|----------------------|---------------------|-------------------------------|--|
| 10/676,509 | 10/01/2003 | Allegra A. May | 69506 | 8548 | |
| 25702 7590 02/08/2007 SCOTT C. RAND, ESQ. MCLANE, GRAF, RAULERSON & MIDDLETON, PA 900 ELM STREET, P.O. BOX 326 MANCHESTER, NH 03105-0326 | | | L. | EXAMINER MUSSELMAN, TIMOTHY A | |
| | | | ART UNIT | PAPER NUMBER | |
| | , | | 3714 | | |
| SHORTENED STATUTOR | Y PERIOD OF RESPONSE | MAIL DATE | DELIVER | Y MODE | |
| 3 MONTHS | | 02/08/2007 | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | • | | | | |
|--|---|--|--|--|--|--|
| , | Application No. | Applicant(s) | | | | |
| Office Action Commence | 10/676,509 | MAY, ALLEGRA A. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Timothy Musselman | 3714 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| • • | ALC OFT TO EXPIDE A MONTH | C) OD THIDTY (20) DAYO | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim 11 apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. sely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| .1)⊠ Responsive to communication(s) filed on 6-19- | 2006 | | | | | |
| | action is non-final. | | | | | |
| <i>,</i> | - | | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | · | | | | |
| 4)⊠ Claim(s) <u>1-18,20-31,33 and 36</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-18,20-31,33 and 36</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application Papers | | . · | | | | |
| 9) The specification is objected to by the Examiner | • | | | | | |
| 10) ☐ The drawing(s) filed on <u>01 October 2003</u> is/are: | a)⊠ accepted or b) objected | to by the Examiner. | | | | |
| Applicant may not request that any objection to the o | drawing(s) be held in abeyance. See | e 37 CFR 1.85(a). | | | | |
| Replacement drawing sheet(s) including the correcti | | | | | | |
| 11) ☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) ☐ Acknowledgment is made of a claim for foreigna) ☐ All b) ☐ Some * c) ☐ None of: | priority under 35 U.S.C. § 119(a) | -(d) or (f). | | | | |
| Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the prior | • | ed in this National Stage | | | | |
| application from the International Bureau | · | 4 | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application | | | | | | |
| Paper No(s)/Mail Date 6) Other: | | | | | | |
| | | | | | | |

DETAILED ACTION

Status of Claims

In response to the amendment filed 6/19/2006, claims 1-18, 20-31, 33, and 36 are pending. Claims 19, 32, and 34-35 are cancelled.

Claim Rejections - 35 USC § 101

The following is a quotation of 35 U.S.C. 101:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.

[1] Claims 30 and 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims to data structures per se (i.e., a computer readable medium encoding a markup language document) are not statutory subject matter. In order to be statutory subject matter, the data structure on the computer readable medium must be described as linked to a system wherein the structural and functional interrelationships between the data structure and other claimed aspects of the invention are capable of being realized (e.g., a computer readable medium encoded with a mark-up language document, operable when executed by a computer to...). See MPEP 2106. Claim 31 is rejected due to its incorporation of the above through its dependency.

Claim Rejections - 35 USC § 103

The following is a quotation of the relevant portion of 35 U.S.C. 103(a) that forms the basis for the rejections made in this section of the office action;

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a

Application/Control Number: 10/676,509

Art Unit: 3714

whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Claims 1-3, 5-12, 14, 17-18, 20, 22-23, 27-30, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowyer (US 2004/0162719) in view of Slotznick et al. (US 2002/0178007).

[2] Regarding claims 1, 8, 17-18, and 30, Bowyer discloses an apparatus and method for language learning assistance, comprising a processor for executing a language instruction program, a video display device including a display screen for displaying one or more words in a first language for audible playback on the display screen, a pointing device for controlling a cursor movable on the display screen of the video display device in response to a user operating the pointing device, a memory, and an audio output device. See paragraph 14. Bowyer discloses wherein said one or more word may be part of a multiword phrase or sentence. See paragraph 30. Bowyer further discloses an HTML document comprising an embedded web object, said embedded web object for playing a fluent, pre-recorded digital recording of said one or more words for playback. See paragraphs 30 (pre-recording, fluency) and 48 (playing embedded audio). Bowyer further discloses a rollover hot region on the display screen associated with each of said one or more words, said rollover hot region configured to cause audible playback of said word in a first language when at least a portion of the cursor is moved over the rollover hot region which at least partially overlaps each of said one or more words. See paragraph 48. Bowyer fails to teach of an on-screen object selectable with said pointing device and associated with and proximate to said multiword phrase or sentence displayed on said display screen, and configured to trigger audio playback of said multi-word phrase or sentence. However, Slotznick teaches of a reading assistance system that includes this limitation. See paragraph 47. Bowyer further fails to teach of an on-screen object selectable with said pointing device and associated with said word, the selection of said object triggering an audio playback related to said displayed word in a second language different from the displayed language. However, the system of Slotznick meets this limitation. See paragraphs 47 (user selectable objects) and 66 (translation). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

Art Unit: 37.14

invention, to use the afore-mentioned features of Slotznick, in the system of Bowyer, so as to provide readily available oral readings and/or translations of the displayed words or phrases to the user to aid in the learning of a language.

- [3] Regarding claims 2, 3, and 29, Bowyer discloses wherein the rollover region is substantially contiguous with a set of pixels occupied by said word on the display screen, and not visible to the user. See paragraph 28.
- [4] Regarding claim 5, Bowyer/Slotznick disclose a system that provides a user selectable object that when selected triggers an audio playback of a version of a displayed one or more words, said audio playback being in a second language different from the first displayed language. See paragraph 2 above. Bowyer/Slotznick do not address which of these first or second languages is the primary language of the user. Applicant has not disclosed that providing the displayed word or phrase in a translated language, and the audio in the primary language of the user, solves any stated problem, or is for any particular purpose. Moreover, it appears that the system would work equally well in the opposite case (translation language displayed, audio in primary language), as both configurations provide for effective language training. Accordingly, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have modified Bowyer/Slotznick such that the first language (displayed) was the language being learned by the user, while the second language (audio) was the primary language of the user, because such a modification would have been considered a mere design consideration which fails to patentable distinguish over the prior art of Bowyer/Slotznick.
- [5] Regarding claim 6, Bowyer discloses wherein said displayed word is part of a multiword phrase or sentence in said first language appearing on said display screen. See paragraph 30.
- [6] Regarding claims 7 and 9, Bowyer fails to explicitly teach of each word of the multi-word phrase or sentence being individually selectable with the pointing device. However, Slotznick teaches of this feature

in paragraph 73. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention, to utilize the afore-mentioned limitation of Bowyer, in the system of Slotznick, so as to allow a user to focus on particular problem words during the learning of a language.

[7] Regarding claim 10, Bowyer discloses wherein all words of said multiword phrase or sentence are contained in a single digital audio file. See paragraph 30.

[8] Regarding claims 11 and 33, Bowyer discloses wherein said embedded object is a SWF file, and said digital audio file is an MP3 file. See paragraphs 42 – 48, where Bowyer discloses the details of creating the FLASH file.

[9] Regarding claim 12, Bowyer discloses a plurality of displayed words for playback appearing on said display screen, said plurality of displayed words appearing as individual words, multiword phrases or sentences, or a combination thereof, and a distinct rollover region associated with each of said words, each distinct rollover region defined at a position on the display screen overlapping a position on the display screen of said word with which the rollover region is associated and configured to cause audible playback of said word in said first language when at least a portion of the cursor is over the rollover region. See paragraph 32.

[10] Regarding claim 14, Bowyer fails to expressly teach of an on-screen visual cue that appears during playback. However, Slotznick teaches of this feature in paragraph 44. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention, to utilize the visual cue method of Slotznick in the system of Bowyer, so as to provide a way for the user to visually associate the printed text with the spoken word.

[11] Regarding Claims 20 and 27, Bowyer discloses designing a spoken words interface including one or more words in viewable form. See paragraph 14. Bowyer further discloses creating a fluent digital sound

recording of said one or more words for audible playback and embedding an HTML object for playing said sound recording in an HTML page. See paragraphs 30 (fluent recording) and 48 (playing embedded audio). Bowyer further discloses for each of said one or more words, defining a rollover region on said spoken words interface and associating at least a portion of said digital sound recording with each rollover region so as to cause audible playback of at least a portion of said digital sound recording in response to user input comprising positioning at least a portion of an on-screen cursor over the rollover region. See paragraph 14. Bowyer further discloses wherein each rollover region is defined on the spoken words interface at an on-screen location selected from a location which at least partially overlies an onscreen location of an associated one of said one or more words, and a location visually associated with said word. See paragraph 14. Bowyer further discloses creating an action viewable on a display screen by a user and associating said action with said one or more on-screen objects. See paragraph 27. Bowyer fails to teach of one or more user selectable on-screen objects for triggering playback of said one or more words (in either the users native language or a translation), and of associating each of said onscreen objects with a selected one or group of said one or more words and placing each of said one or more on-screen objects on the spoken words interface proximate the selected one or group of said one or more words. However, the system of Slotznick meets the afore-mentioned limitations. See paragraphs 47 (user selectable objects) and 66 (standard and bilingual playback). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the afore-mentioned features of Slotznick, in the system of Bowyer, so as to provide readily available oral readings and/or translations of the displayed words or phrases to the user to aid in the learning of a language.

Page 6

[12] Regarding claim 22, Bowyer discloses testing the FLASH file prior to creating. See paragraph 47.

[13] Regarding claim 23, Bowyer discloses one or both of testing the HTML page on one or more targeted platforms, or publishing the HTML page on the web. See paragraph 48.

[14] Regarding claim 28, Bowyer fails to teach of human viewable indicia that allows for transvisualization of the word. However, Slotznick teaches of this feature in paragraph 44. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention, to utilize the viewable indicia from Slotznick in the system of Bowyer, so as to provide a visual aid to the spoken translation.

Claims 4, 13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowyer (US 2004/0162719) in view of Slotznick et al. (US 2002/0178007), and in further view of Siegel (US 6,442,523).

[15] Regarding claim 4, Bowyer/Slotznick disclose a system that meets all of the limitations of claim 1 as described in paragraph 2 above. Bowyer/Slotznick fail to explicitly teach of the rollover region being defined by a rectangular box that is equal in size to and enclosing said word. However, Siegel discloses a language learning system that teaches of this limitation. See col. 22: 55-65. Note that the grid is a series of rectangular boxes (figure 7, sub-label 724). Each rectangular grid member is disclosed as being proportionally sized to fit the largest word in a column, and a selection device rollover of the word (and hence the box sized to fit the word) triggers audio playback of the word. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention, to incorporate the rollover region characteristics of Siegel into the system of Bowyer/Slotznick, so as to provide effective triggering of audio playbacks with associated words.

[16] Regarding claim 13, Bowyer/Slotznick disclose a system that meets all of the limitations of claim 12 as described in paragraph 9 above. Bowyer/Slotznick fail to teach of audible playback being suppressed when at least a portion of the cursor moves over the rollover region during a time in which said audio output device is already causing audible playback. However, Siegel teaches of this limitation in col. 36: 15-20. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention, to utilize the afore-mentioned feature of Siegel in the system of Bowyer/Slotznick, so as to provide a coherent manner in which to articulate selected words.

[17] Regarding claim 16, Bowyer/Slotznick fail to teach of said rollover region associated with said word being defined by a rectangular box with top and side boundaries that are aligned with the top and side boundaries of said word and a bottom boundary that extends a predetermined number of pixels below the bottom of said word. However, Siegel teaches of these rollover features in FIG. 7, label 722A. The rectangular box containing said word marks the boundary of an image containing the word 'laugh'. This is known because in col. 22: 55-65, Siegel discloses that the selected image is highlighted, and further discloses that the image marks the boundary of a rollover region that triggers audio playback of said word. The top boundary of the image is aligned with the top boundary of the word to the maximum extent possible (e.g. they are parallel). Likewise, the side boundaries of the image are aligned (parallel) with the side boundaries of the word to the maximum extent possible. Further, it is clear from label 722A that the bottom boundary of the image (rollover region) is extended below the bottom boundary of said word. This extension is inherently a pre-determined number of pixels below the bottom boundary of said word, because if display and system interaction characteristics (such as rollover regions) were not available to the computing device prior to display to the user, there would in practice be no system at all, as the system cannot function without display data. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention, to incorporate the rollover region characteristics of Siegel into the system of Bowyer/Slotznick, so as to provide effective triggering of audio playback with associated words and phrases while not obscuring said words or phrases with the selection device cursor.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowyer (US 2004/0162719) in view of Slotznick et al. (US 2002/0178007), and in further view of Hacon (US 3,773,989).

[18] Regarding claim 15, Bowyer/Slotznick disclose a system that meets all of the limitations of claim 1 as described in paragraph 1 Above, but fail to teach of a transparent touch screen overlaying said display screen for use as a pointing mechanism. Hacon, however, teaches of just such a device for use in systems that require user input and display. See col. 1: 20-50. Therefore, it would have been obvious to

Application/Control Number: 10/676,509

Art Unit: 3714

one of ordinary skill in the art at the time of the invention, to utilize the touch screen system of Hacon, in the system of Bowyer/Slotznick, in order to provide the user with a convenient means to provide input to the system.

Claims 21, 24-26, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowyer (US 2004/0162719) in view of Slotznick et al. (US 2002/0178007), and in further view of Kirksey et al. (US 6,062,863).

[19] Regarding claims 21, 26, and 31, Bowyer/Slotznick disclose a system that meets all of the limitations of claims 20 and 30 as described in paragraph 2 above. Bowyer discloses creating a FLASH document including an image viewable on the display, a digital sound recording, creating a FLASH file (SWF) from the document, and embedding said FLASH file as an object in an HTML page. See paragraphs 42-48. Bowyer further discloses text of said one or more words on the spoken words interface (claim 26). Bowyer further discloses wherein said image is a digital representation. See paragraph 26, and note that GIF files are digital image representations. Bowyer further discloses wherein said image contains said word in said first language (claim 31). See paragraph 26. Bowyer fails to teach of said image being a background image. However, Kirksey discloses a computer based language instruction system that teaches of using images as backgrounds (in the sense that there are objects visible/available to the user superimposed onto the image). See col. 7: 25-35. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to incorporate the background image characteristics of Kirksey into the FLASH file creation procedure of Bowyer/Slotznick, so as to simplify the creation process by placing multiple words and phrases onto one image (as opposed to Bowyer/Slotznick, wherein one word or phrase corresponds to only one image).

[20] Regarding claims 24 and 25, Bowyer/Slotznick fail to teach wherein the background is selected from one or more of scanned photographs, digital photographs, scanned artwork, and digital artwork, or any combination thereof. However, Kirksey teaches of this feature in col. 5: 10-20. Bowyer Slotznick further

fail to teach wherein the background bears a thematic relation to the text and said one or more words and the background combine to tell a story. However, Kirksey teaches of these features in col. 6: 55-65.

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention, to incorporate the background image styles of Kirksey into the background images of Bowyer/Slotznick, so as to provide a themed appearance to the user in order to maintain interest in the system.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowyer (US 2004/0162719) in view of Kirksey et al. (US 6,062,863).

[21] Regarding claim 36, Bowyer discloses a system for learning languages comprising an image and text of one or more words for audible playback. See paragraphs 26-28. Bowyer further discloses creating a digital image representation of the background. See paragraph 26, and note that GIF files are digital image representations. Bowyer further discloses creating a digital sound recording of one or more words for audible playback. See paragraph 25. Bowyer further discloses for each of said one or more words, defining a rollover region and associating at least a portion of said digital sound recording with each rollover region so as to cause audible playback of at least a portion of said digital sound recording in response to user input comprising positioning at least a portion of an on-screen cursor over the rollover region. See paragraph 32. Bowyer further discloses wherein each rollover region is defined at an onscreen location selected from a location which at least partially overlies an on-screen location of an associated one of said one or more words, and a location visually associated with said word. See paragraph 32. Bowyer further discloses creating a FLASH document including said image and said digital sound recording, creating a FLASH format (SWF) from the FLASH document, storing said image and digital sound recording in the document library of said FLASH document, and of placing said image on a first layer of said document. See paragraphs 46 and 47. Bowyer fails to teach of said image being a background image. However, Kirksey discloses a computer based language instruction system that teaches of using images as backgrounds (in the sense that there are objects visible/available to the user

superimposed onto the image). See col. 7: 25-35. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to incorporate the background image characteristics of Kirksey into the FLASH file creation procedure of Bowyer, so as to simplify the creation process by placing multiple words and phrases onto one image (as opposed to Bowyer, wherein one word or phrase corresponds to only one image). Bowyer further does not expressly disclose wherein the digital sound recording is on the second layer of the FLASH document. Applicant has not disclosed that placing the digital sound recording on the second layer of the FLASH document provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Bowyer's and applicant's invention to perform equally well regardless of whether or not the digital sound recording is on the second layer of the FLASH document, since both applicants invention and the system of Bowyer utilize the same method of embedding a FLASH object into an HTML document, said FLASH object containing both an image associated with a word, and a digital sound recording which is triggered for playback by a mouse rollover of said word. Therefore, it would have been prima facie obvious to modify Bowyer to obtain the invention as specified in claim 36 because such a modification would have been considered a mere design consideration which fails to patentably distinguish over the prior art of Bowyer.

Response to Arguments

Applicant's arguments regarding the rejection of claims 30-36 under 35 U.S.C. 101 have been considered. Regarding the rejections of claims 32-36, applicants arguments that these claims were included in the rejection in error are persuasive, and these rejections have been withdrawn. This office action is made NON-FINAL.

Applicant's amendments to claims 30 and 31 are not sufficient to overcome the previous rejection.

Applicant claimed a computer readable medium encoded with a mark-up language document, and has not disclosed the means by which structural and functional interrelationships between the data structure and other claimed aspects of the invention are realized. In order to be statutory subject matter, the

Application/Control Number: 10/676,509

Art Unit: 3714

claimed invention must be drawn to a system wherein the data structure is capable of causing functional

change (e.g., a computer readable medium encoded with a mark-up language document, operable when

executed by a computer to...). Without being linked to a system capable of executing the functionality of

the document encoded on the computer readable medium, the structure on the medium is reduced to

descriptive data, which is not statutory subject matter. See MPEP 2106.

Applicant's arguments with respect to all further claims have been considered but are moot in view of the

new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be

directed to Timothy Musselman whose telephone number is (571)272-1814. The examiner can normally

be reached on Mon-Thu 6:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Robert Olszewski can be reached on (571)272-6788. The fax phone number for the organization where

this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC)

at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative

or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-

1000.

, TM KATHLEEN MOSSER

Page 12